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## ***VXIplug&play* Software Kit** **NI-VISA™ for Windows 95/NT** **WIN95, GWIN95, WINNT, and GWINNT Frameworks**

Thank you for purchasing a National Instruments *VXIplug&play*-compliant controller. To be compliant with *VXIplug&play* specifications, a *VXI* controller must provide the VISA I/O driver library standardized by *VXIplug&play*. VISA ensures that your controller can run all *VXIplug&play*-compatible software now and in the future, while NI-VXI and NI-488.2 ensure that your controller can run the installed base of drivers and applications. The NI-VXI and/or NI-488.2 driver software components are included with your controller, and the documentation that accompanies your controller describes how to install and use them. This *VXIplug&play* software kit includes NI-VISA, which is the National Instruments implementation of VISA, and related documentation. This document describes how to use the Setup program to install your NI-VISA software.

The NI-VISA software in this kit is compatible with the WIN95/GWIN95 and WINNT/GWINNT frameworks. With NI-VISA installed on your computer, you can run any *VXIplug&play* software that is compatible with these frameworks. This includes instrument drivers and executable soft front panel software that are included with *VXIplug&play*-compatible instruments from a variety of vendors.

Please also see the `readme.txt` file included with your software for the most up-to-date information about this release of NI-VISA.

## **Components**

The *VXIplug&play* software kit contains the following software and documentation components.

### **Software**

- VISA 1.0 Dynamic Link Library
- VISA 1.0 Microsoft C and Borland C Import Libraries
- VISA 1.0 Microsoft Visual Basic Support Files

- VISA 1.0 GPIB-VXI Component
- VPP-6 Compliant Windows 95/NT Installer

## Documentation

- *NI-VISA Programmer Reference Manual*
- *NI-VISA User Manual*

## Supported Application Development Environments

The following Application Development Environments (ADEs) are supported with this release of NI-VISA for Windows 95/NT.

- LabVIEW version 4.x
- LabWindows<sup>®</sup>/CVI version 4.x
- Borland C/C++ version 4.5.x
- Microsoft Visual C/C++ version 2.x or 4.x
- Microsoft Visual Basic version 4



**Note:** *Although NI-VISA has been tested and found to work with these ADEs, other ADEs or higher versions of the ADEs listed above may also work.*


# Installation Procedures

## Step 1. Install Your NI-VXI/NI-488.2 Driver Software

The installation method varies depending on the type of controller you have purchased, as shown in the following table. Refer to the documentation that came with your controller for detailed installation instructions.

Controller	Installation
VXIpc embedded controller	NI-VXI and NI-488.2 are already installed on your hard drive.
VXI-AT2010 MXI Controller	Install the NI-VXI for Windows/Windows NT software.
VXI-AT4000 MXI Controller	Install the NI-VXI for Windows software.
VXI-PCI8000 MXI Controller	Install the NI-VXI for Windows/Windows 95/Windows NT software.
GPIB-VXI/C controller or any National Instruments GPIB board that has a Windows 95 or Windows NT driver	Install the NI-488.2 for Windows 95/Windows NT software.

You can also use a National Instruments serial board that works along with the serial ports on your computer. In this case you do not need to install NI-VXI or NI-488.2.

 **Note:** *Because this implementation of VISA is a 32-bit driver, it looks for 32-bit versions of NI-VXI and/or NI-488.2. If you are installing NI-VISA on Windows 95 and have only 16-bit drivers, please contact National Instruments to request the NI-VXI Upgrade for Windows 95 or the Compatibility Release for NI-488.2.*

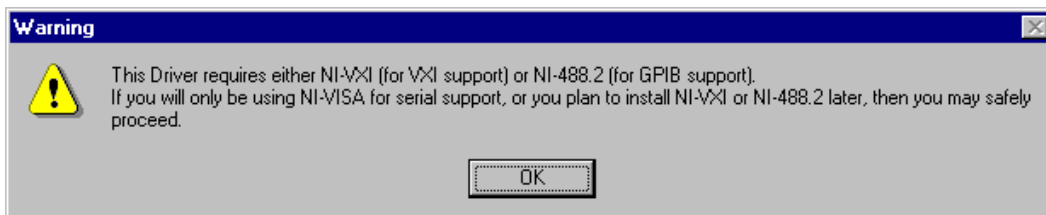
## Step 2. Install Your NI-VISA Software

Controller	Installation
VXIpc embedded controller	<p><b>New VXIpc controllers:</b> NI-VISA is already installed on your hard drive. The remainder of this document applies only if you want to use the Setup program to make changes to your software.</p> <p><b>Upgrades:</b> If you received this kit to upgrade your VXIpc, continue with the rest of this document to install the NI-VISA software.</p>
All other cases	Install the NI-VISA software. The remainder of this document describes how to use the Setup program to install your software.

### Start the Setup Program

Insert the NI-VISA diskette into your disk drive. Under Windows 95, you can run `SETUP.EXE` either from a DOS prompt or from the **Start..Run** menu. Under Windows NT, you can run `SETUP.EXE` from a DOS prompt or from the Program Manager **File..Run** menu.

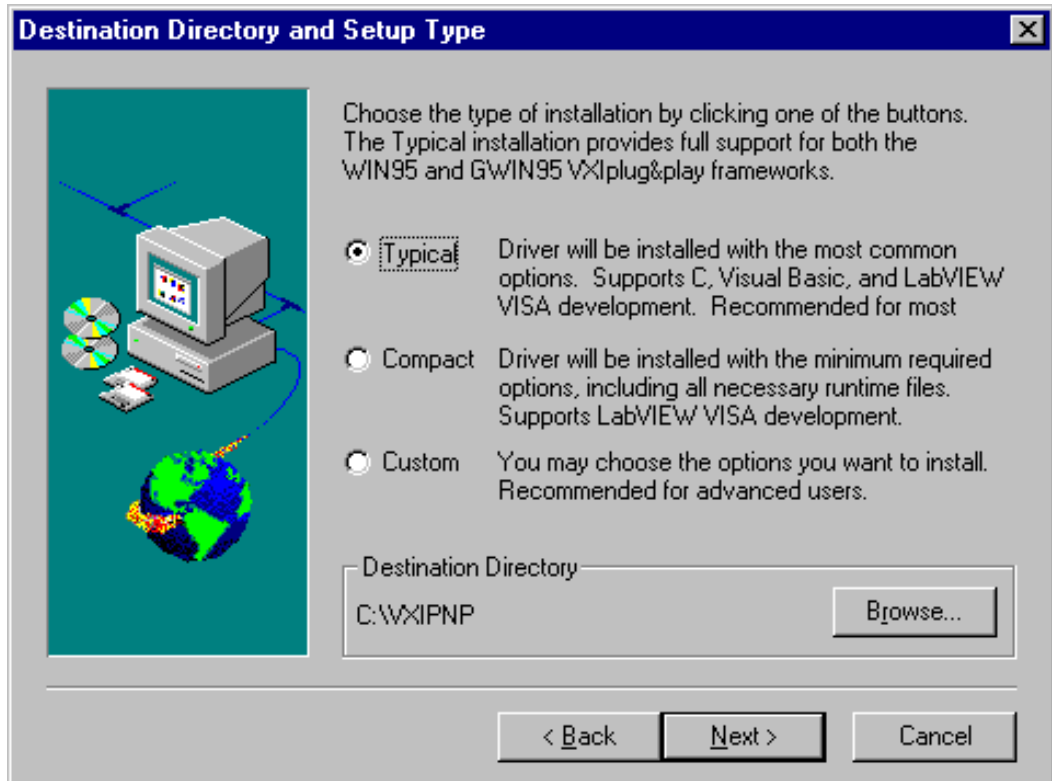
The following warning screen pops up if applicable.



If this situation applies, click **OK** but exit the main screen when it appears. As mentioned earlier, you should already have installed NI-488.2 and/or NI-VXI according to the instructions contained in its accompanying documentation.


## Installation Options

The following screen is a typical main menu.

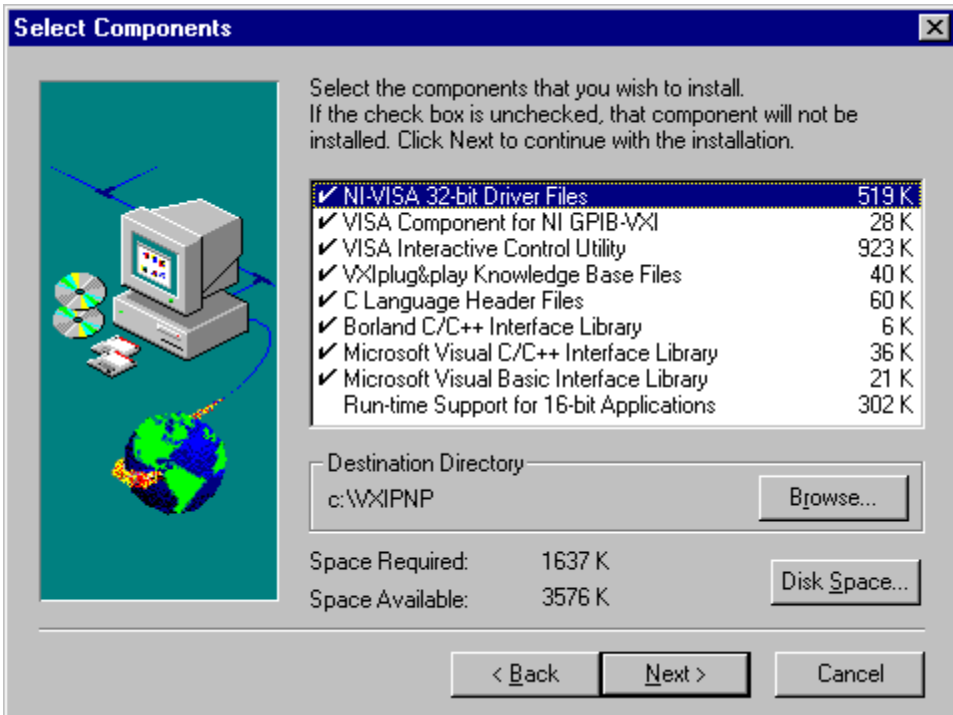


The **Destination Directory** specifies where all *VXIplug&play* files will reside. As shown in the main menu, the installer creates the directory structure under the C:\VXIIPNP directory by default.

You can use the options on this screen to select different types of installation. The **Typical** installation, the default selection, installs the most common options including development and run-time support for 32-bit VISA applications.


 **Note:** *If you are installing the NI-VISA software through LabVIEW, the default selection on this screen will be the Compact installation option rather than Typical.*

Typically, you would press the **Next** button to accept the suggested options. Otherwise, press **Custom** to change any or all of the installation options. When you select the **Custom** option, the following screen appears. If you did not select the **Custom** option, skip to the next section.



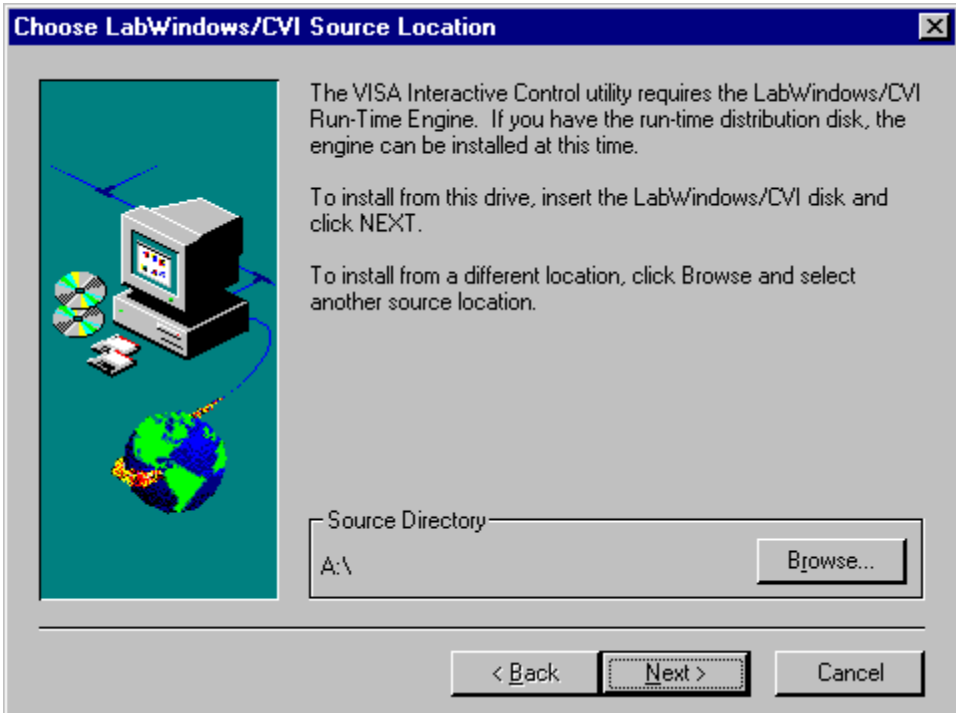
You can use the **Custom** option to select only those components you want to install on your computer. You can either select or deselect any options by clicking on them.

By default, the **Run-time Support for 16-bit Applications** option is not selected and will not be installed. Run-time support includes the DLLs for executing an existing 16-bit NI-VISA application. This option is not available when installing on the Windows NT platform.

 **Note:** *The 16-bit and 32-bit NI-VISA drivers can coexist on Windows 95 without problems, as they operate independently. The only feature that will not work completely is locking, because a resource locked by one driver will appear unlocked from the other driver.*

## LabWindows/CVI Run-Time Engine

If you have chosen to install the VISA Interactive Control utility and you do not already have the LabWindows/CVI Run-Time Engine installed on your computer, you may install it at this time. If you choose to install it, the following screen appears. Specify the source location and click **Next**.



## Modifying System Files



**Note:** *When installing NI-VISA under Windows NT, Setup sets the `VXIPNPPATH` and `PATH` environment variables in the Windows NT Registry. The remainder of this section applies to Windows 95 only.*

Setup modifies your `WIN.INI` and `AUTOEXEC.BAT` files as follows.

### WIN.INI

Setup adds the following lines to your `WIN.INI` file. The following text assumes you have chosen `C:\VXIPNP` as your installation directory, and have chosen the **Run-time Support for 16-bit Applications** installation option.

```
[ VXIPNP ]
VPNPPATH=C:\
VXIPNPPATH=C:\VXIPNP
```

### AUTOEXEC.BAT

Under the **Typical** and **Compact** options, Setup automatically updates your `AUTOEXEC.BAT` file to set the `PATH` and `VXIPNPPATH` environment variables. Under the **Custom** option, Setup prompts you to confirm the modifications to the `AUTOEXEC.BAT` file before it updates the file. Setup then adds the following lines to the end of `AUTOEXEC.BAT`:

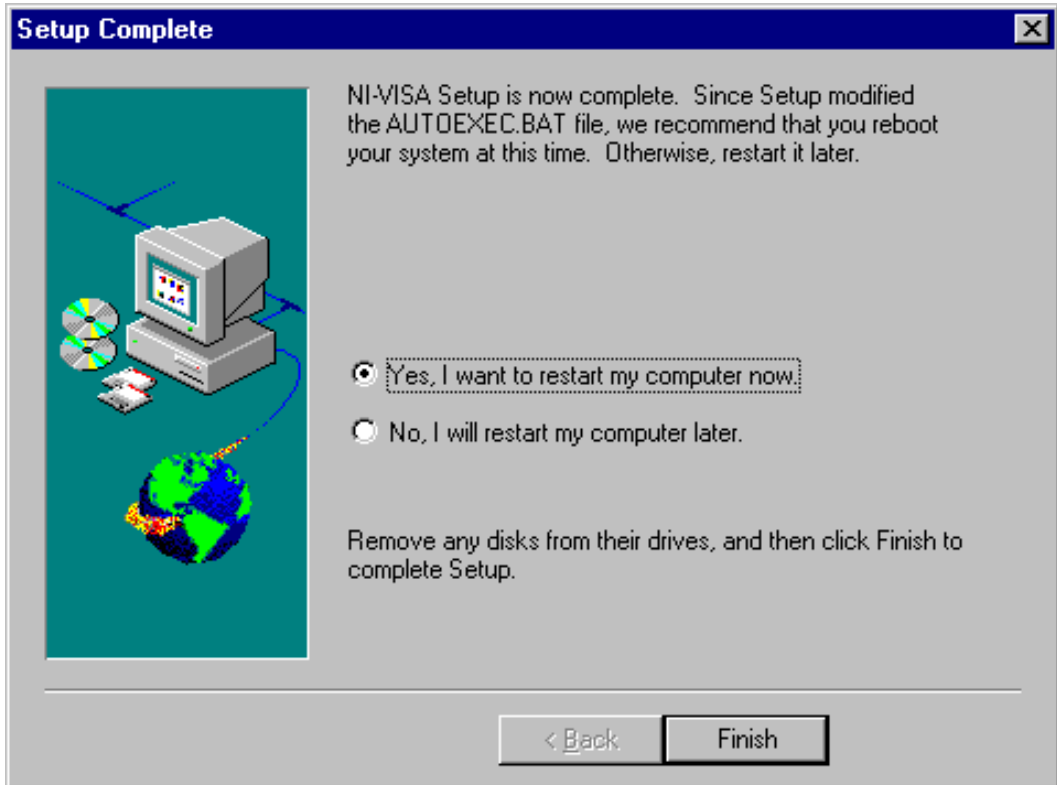
```
SET VPNPPATH=C:\
SET VXIPNPPATH=C:\VXIPNP
SET PATH=%PATH%;C:\VXIPNP\WIN95\BIN
```



## Exiting the Setup Program

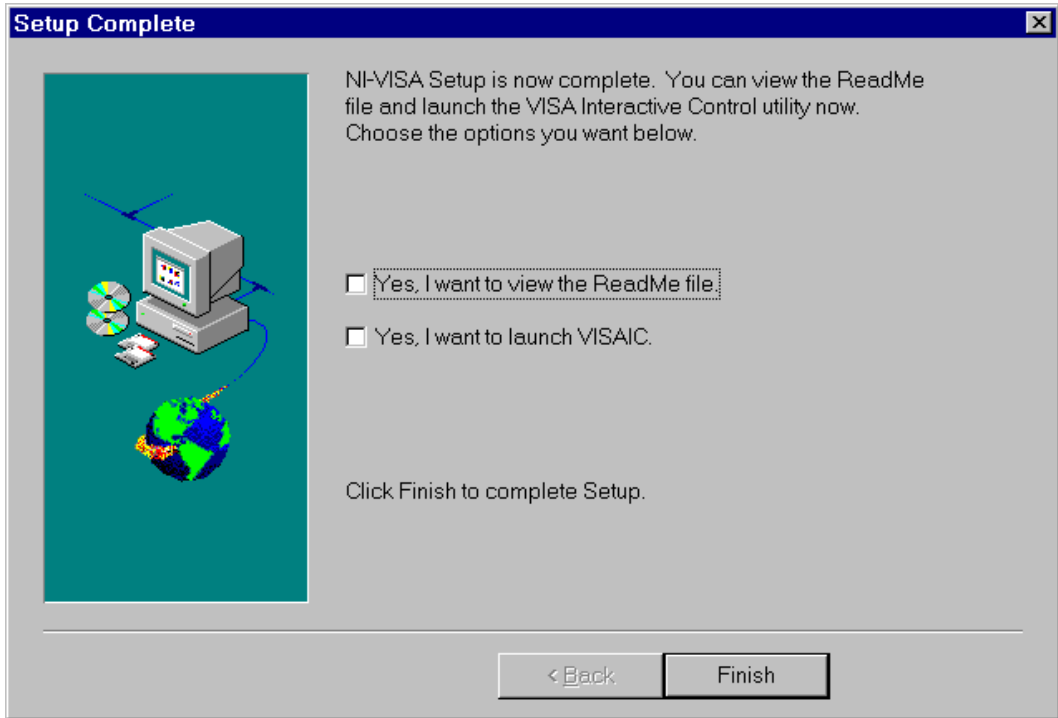
The Setup program completes differently depending on whether the `AUTOEXEC.BAT` file has been modified.

If the `AUTOEXEC.BAT` file has been modified, the following screen appears after a successful installation:



You can either reboot the computer now so that the changes take effect immediately, or you can reboot the computer at a later time, but you should not use the NI-VISA software until you have rebooted your computer.

If the AUTOEXEC.BAT file has not been modified, the following screen appears.



You can view the ReadMe file to get important tips on using the NI-VISA driver.

## Updating the NI-VISA Setup

You can run the Setup program again to accommodate changes you want to make. The same screens and messages will be displayed as when you previously installed the software. Select the **Custom** option to configure any changes.





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